OBSESSIONS OF BIOLOGISTS

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EVOLUTION PROTEST MOVEMENT

OBSESSIONS OF BIOLOGISTS

'The most discouraging feature of the whole problem of biological evolution, to one who has been trained in the exact phraseology and rigorous logic of the physical and mathematical sciences, is the loose language and the still looser reasoning of the biologists. Up to a certain point their language and methods are those of science and then comes a lapse into the methods of the untrained thinker' (L. T. More, Professor of Physics, University of Cincinnati, *The Dogma of Evolution*, 1925, pp. 236-7).

WHEN we examine the often conflicting and mutually incoherent arguments[1] offered for belief in organic evolution, we find that the whole case is based on the dogma of continuity,[2] and also that there are certain propositions regarding which many transformists are now so positive that they abandon scientific method and exhibit clear marks of obsession whenever the same are approached. It is therefore proposed to examine some of these *idées fixes* beginning with what is probably the most widespread conviction of all, namely:

I. THAT MAN IS DESCENDED FROM APE

We have already discussed the arguments for this belief,[3] and are here more concerned with its effects as an obsession. It is certainly strange that so many modern biologists should be affected by it, since:

(*a*) The belief is not essential to evolution;[4]

(*b*) Nobody can name a pithecoid fossil which is demonstrably ancestral to *Homo sapiens;* and

(*c*) There are strong reasons for denying that man can be descended from any kind of ape (see, *e.g.*, Professor F. Wood Jones' *Problem of Man's Ancestry* and *Man's Place among the Mammals*).

Charles Darwin himself exhibited the effects of this obsession (adumbrated a century earlier by Lord Monboddo and others) when he wrote:

'The Simiadæ then branched off into two great stems, the New World and the Old World monkeys, and from the latter Man, the wonder and glory of the universe, proceeded' (*Descent of Man*, 2nd edit., reprint 1906, p. 255).

For note that, although Darwin could not specify a single member of the long ancestral series here claimed, he nevertheless admitted no doubt about the latter. Although trading

[1] See *The Nineteenth Century*, January, 1944, pp. 27-36.

[2] *Ibid.*, August, 1943, pp. 77-78, etc.

[3] *Ibid.*, April, 1943, pp. 172-173; April, 1944, pp. 160-168.

[4] Classic writers postulated the evolution of man from 'a dumb and filthy herd of animals' scrambling for 'acorns and lurking places.' The identification of that herd with apes did not come until about two millenniums later, when transformist ideas were being reintroduced to civilised circles by writers like Lucilio Vanini (1616), de Maillet (1748), Robinet (1768), Bonnet (1769) and others.

in what was (and still is) obviously pure hypothesis, he neither says that man 'may have proceeded,' nor that 'we believe that he proceeded,' but boldly and positively declares that man 'proceeded.'

Similarly H. G. Wells, G. P. Wells and Julian Huxley now assure us, regarding some unnamed and purely hypothetical creature of their imagination, that:

'Four-footed, tailed and hairy it took to the Eocene forests; it grew into lemur, into monkey, into ape; and finally ape turned into man-ape, and man-ape grew to man' (*The Science of Life*, p. 419).

The fact that primates are known from the base of the Eocene, shows that this 'four-footed' (not four-handed), etc., creature and its 'forests' belong to some dreamland pre-Eocene grafted into the real Eocene.

Even Haeckel[3] showed the purely presumptive nature of all such talk despite his own italicised statement that:

'*The descent of Man from an extinct Tertiary series of Primates is not a vague hypothesis, but an historical fact*' (*The Last Link*, 1898, p. 76).

For he repeatedly admitted, in his saner moments, that this descent is inevitably hypothetical. Thus, in one of his most formal works, he deliberately declared that:

'It is self-evident that our genealogical history is and ever will be a fabric of hypotheses' (*Systematic Phylogeny*, 1894-6, Vol. I, Preface, p. vi).

And twelve years later he repeated the admission, saying:

'All ideas we can possibly form about the stem-history of any organism, even after the most critical investigation, are and must remain hypotheses' (*The Story of Our Ancestors*, 1908, p. 6).

The trouble, of course, is that science is incapable of actually proving genetic connections apart from historic testimony, which is entirely lacking in regard to the distant past.

'The palæontologist [as Dr. Bather remarked] cannot assist at even a single birth' (*Rep. Brit. Ass. Adv. Sci.*, 1920, 'Geology,' p. 7).

And Dr. Lang insists that:

'it is impossible to prove a true lineage, and extremely improbable that we can ever produce anything but an approximation to one' (*Proc. Geol. Ass.*, Vol. 41, 1930, p. 178).

Nothing more annoys the fervent theorist, however, than to have the presumptive nature of his ideas pointed out; so Oscar Schmidt, Professor of Zoology in the University of Strasburg, angrily wrote:

'That our museums are still destitute of the fossil progenitors of man is no more strange than the deficiency, hitherto existing, of intermediate forms which would conclusively decide the position of Dinotherium in the system. . . . The demand . . . that the adherents of the doctrine of descent should produce the intermediate forms which at one time necessarily existed, can be made only by dilettantes to whom the province of life, as a whole, has remained a sealed book' (*The Doctrine of Descent and Darwinism*, 1905, p. 294).

In other words, we should abandon even the demand for intermediate forms which would at least give colour to the theory, and (on pain of being called 'dilettantes' if we refuse) accept one purely imaginary ancestry because, forsooth, we have already accepted another

[3] Who was himself subject to this obsession. 'Man,' he wrote, 'is directly connected with this anthropoid family and originates from it' (*The Evolution of Man*, p. 263). He heads a chapter of this work 'Our Ape Ancestors.'

purely imaginary ancestry.* Thus fiction automatically piles on fiction, the whole process being the reverse of that recognised by true science.

We can therefore appreciate the pained surprise with which our speculators sometimes note that facts refuse to endorse their dreams. Thus Sir Arthur Keith pathetically remarks:

'It was expected that the embryo would recapitulate the features of all its ancestors from the lowest to the highest forms in the animal kingdom. Now that the appearances of the embryo at all ages are known, the general feeling is one of disappointment: the human embryo at no stage is anthropoid in appearance' (*The Human Body*, 1912, pp. 94-5).

How disobliging of the embryo to refuse to conform to current fiction!

Nevertheless, that fiction continues to be promulgated on all hands, and is instilled into school children from their earliest years. In order to pass their examinations, they have to declare that man has descended from beast and 'has assumed the upright gait completely' (*Elementary Biology for Matriculation and Allied Examinations*, by M. E. Phillips and E. L. Cox, p. 144).

The B.B.C. also lends its powerful aid, affording propagandists every facility to transmit their fixed ideas to the rising generation, from its earliest, most impressionable and defenceless years. Thus we have recently had two series of Talks to Schools, which are thoroughly misleading and the reverse of scientific, namely, 'Biology in the Service of Man' and 'How Things Began.' In the talk of the former series, delivered on June 21st, 1942, Professor H. Munro Fox told his child audience that:

'Our ancestors became man about one million years ago. . . . Our nearest relatives are the apes, chimpanzee and gorilla. . . . Our ancestors which were neither ape nor man took to the trees. Our ancestors came down from these. . . . One branch of these ancestors slowly and gradually evolved into man.'

All this, of course, is sheer fiction. Similarly, in the series 'How Things Began,' which was written by Honor Wyatt, and takes the form of conversations between a man and two children, the children taking part were told (in the talk of January 19th, 1943) and made to repeat, that: 'First came "ape-man," then "near man," and last "true man."' It is monstrous that the judgment of the coming generation should be so warped from its infancy.

Not only has their obsession that they are descended from apes led biologists to invent copious fictions of the above sort, but it has caused some of them to suppress evidence which conflicted with the same. A flagrant instance of this was Dr. Eugene Dubois' failure for twenty-six years to disclose the fact that he had found in Java some fossil human skulls of big-brained type—Wadjak man.† After discovering these, Dubois found, sixty miles away, some more fossil bones, to which he gave the name *Pithecanthropus erectus*, or the ape-man who could stand erect. The fossils which he so named consisted of the vault of a skull, a thigh bone and some isolated teeth, all within a distance of some 20 yards from each other. He gave an account of these to the

* Likewise, when Cope, Adloff and others showed that man's supposed pedigree was composed of creatures which could not possibly have been his actual ancestors, Professor G. Schwalbe complained that similar objections could be raised against nearly all fossil pedigrees, see his article in *Darwin and Modern Science*, pp. 133-134).

† With brain capacity averaging 1,600 c.c. According to Keith, the modern human brain only averages 1,480 c.c.; the Malay average being 1,400 c.c., and the Australian 1,287 c.c. Fossil men often had very large brains.

scientific world in 1894; and, as the thigh bone and the teeth appeared to be those of a man, while the skull seemed to be that of a large ape, anthropologists disputed as to whether or not the skull belonged to the same individual as the thigh and teeth. If it did, then the creature would seem to be half ape, half man—a veritable link between ape and man. As none of these anthropologists knew that fossil remains of true men had been found in Java, and as they believed that men did not inhabit Java in ancient times, the majority deemed *Pithecanthropus* an ape-man; and this gave a tremendous fillip to the theory that man is descended from ape. Thus, for twenty-six years, Dubois fooled a world which was—unfortunately—only too willing to be fooled. For when, owing to discoveries by others of fossil remains of man in Australia, Dubois disclosed the fact that he himself had found human fossils in Java hardly any indignation at his conduct was expressed by his fellow-biologists; so low does their standard of conduct seem to have sunk. An account of Dubois' escapade is given by Sir Arthur Keith in his *Antiquity of Man* (1925). Keith doubts (p. 440) whether Dubois' reticence was 'politic'; but he apparently approves of it, judging by his statement (p. 441) that:

'There can be no doubt that if, on his return in 1894, he had placed before the anthropologists of his time the ape-like skull from Trinil side by side with the great-brained skulls from Wadjak, both fossilised, both from the same region of Java, he would have given them a meal beyond the powers of their mental digestion.'

A tender digestion, my masters!—straining at the gnats of fact and swallowing the camels of fiction. Why should not apes and men have co-existed in the past as they co-exist to-day?

Almost as discreditable as Dr. Dubois' performance is the failure of nearly every recent book (excepting Keith's) dealing with human and other primate fossils, to mention the fact that a number of fossil remains of men of modern type—*e.g.*, the Castenedolo and Calaveras skulls, etc.—have been found in deposits of much earlier date than any which contain the fossils of the creatures commonly cited by evolutionists as ape-men, near-men, etc., such as *Pithecanthropus*, Pekin man, Piltdown man, Heidelberg man, Neanderthal man, Rhodesian man, etc. The only reason for rejecting the evidence of the far greater antiquity of the perfectly human Calaveras, etc., remains is that it does not suit the current obsession. As Keith frankly says:

'Indeed, were such discoveries in accordance with our expectations, if they were in harmony with the theories we have formed regarding the date of man's evolution, no one would ever dream of doubting them, much less of rejecting them.'

And Professor W. H. Holmes complains that:

'To suppose that man could have remained unchanged physically, mentally, socially, industrially and æsthetically for a million years, roughly speaking (and all this is implied by the evidence furnished), seems in the present state of our knowledge hardly less than admitting a miracle' (*Smithsonian Report*, 1899).

Note that the existence of the EVIDENCE IS ADMITTED, but its acceptance is deprecated since it conflicts with current doctrine.

What is worse, the great majority of modern biologists do not simply show their antipathy to the evidence, after the manner of Professor Holmes and Sir Arthur Keith (who calls the Calaveras discoveries 'the "bogey" which haunts the student of early man,' p. 471), but they do not even mention its existence. Examination of their works shows that they habitually mention only those facts which they think will confirm or

enforce their readers' faith in evolution. For the obsession of these men makes them behave as special-pleaders instead of impartial judges of the facts.[8]

Among other human fossils of modern type, of apparently great age, which are ignored by popular writers and broadcasters who make much of Neanderthal remains as those of 'near-men,' etc., preceding 'true men,' are the perfectly human remains found at Bury St. Edmunds, Denise, Abbeville, Lansing, Trenton and Natchez. These all go back at least as far as the Acheulian stage, which preceded the Mousterian stage to which the well-advertised Neanderthal remains pertain.[9] In the still older Chellean—if not Strepyan—stage (the term 'stage' being here used to represent a cultural horizon) have been found the perfectly human Olmo, Clichy, Galley Hill and Ipswich remains. And older than any of these—probably going back to the basic Pleistocene, or late Pliocene, Reutelian stage—are the less particularly described but admittedly perfectly human remains found near Grenelle (p. 278). There are also other human remains of probably equal antiquity, but less definable as to age, found at Rancho le Brea near Los Angeles, Kanam in East Africa, Talgai in Australia, etc.

When discussing these discoveries, which, as he insists, undoubtedly antedate Neanderthal man of whom we hear so much, Keith remarks:

'the majority of anatomists and geologists . . . simply refuse to believe in the authenticity of these discoveries because they run so contrary to our preconceptions' (p. 283);

and he admits that:

'under the presumption that the modern type of man is also modern in origin, a degree of high antiquity is denied to such specimens.'
So 'preconceptions' and 'presumptions' are admittedly in the saddle, and evidence goes to the wall wherever it opposes those despots.

Professor H. H. Woollard has only too much ground for his remarks when he says: 'the notion of a gradual emergence of man . . . has exerted ever a seductive influence upon the minds of anatomists, few of them being able to contemplate any other view consistently for long. This is shown very clearly by their behaviour whenever a new fossil has been discovered. The discoverer has been unable to resist the temptation of asserting that his fossil, if ape-like, presented all sorts of human characters, and, if human and clearly modern in character, that it possessed all sorts of simian characters, more or less hidden and elucidated only by minute examination' (*Science Progress*, Vol. 33, 1938-9, p. 18).

It is therefore refreshing to note that, widely prevalent as this obsession is among modern biologists, it is not universal even among evolutionists. Besides those like Keith

[8] Accounts of these fossils can be seen in Keith's *Antiquity of Man* and S. Laing's *Human Origins* (1892), etc. Nevertheless, so strong is this obsession that Keith himself sometimes forgets all his 'bogeys' and actually asks sceptics regarding man's ape descent how they account for 'the fact that the older strata contain the more primitive and more ape-like forms' (*The Nineteenth Century*, August, 1922, p. 177). The obvious answer is that, on his own showing, the older strata do nothing of the sort. And so we see how, under transformist bias, the writings of modern biologists continually tend to be pathological exhibits instead of consistent scientific records.

[9] Yet Mr. H. G. Wells deliberately represented Neanderthal man as preceding 'The First True Men (*Outline of History*, Book II, Chapters VIII-X), and still writes as if Neanderthal man were ancestral to modern man (*Nature*, April 1st, 1944, p. 396). Such conduct illustrates Professor E. A. Hooten's statement that: 'The Western European classic Neanderthaloid type was altogether a too complete answer to Darwinian prayer. . . . Heretical and non-conforming fossil men were banished to the limbo of dark museum cupboards, forgotten or even destroyed' (*Apes, Men and Morons*, 1938, p. 107, etc.). Similarly, Professor H. H. Woollard, F.R.S., states that: 'This discovery, that recent man has a vast antiquity, in fact greater than any other extinct variety, most anatomists have always tried to get round or minimise' (*Science Progress*, Vol. 33, 1938-9, p. 23).

and Woollard, who sarcastically remark on its effects, there are some who definitely discard it. We have already seen that Professor Wood Jones does so; and Professor Max Westenhofer emphatically declares:

'I am more and more convinced that the Darwin-Haeckel theory of the ascent of man from an ape cannot be supported any longer. In opposition to this theory I was able to show that man . . . can be traced in a direct line to the general basic type of mammal, but not to any particular type of animal and especially not to the ape' (*Research and Progress*, 1937, Vol. 3, p. 92).

Similar remarks have been made by Professor H. F. Osborn, Dr. A. H. Clark and others.[10]

We now pass to another *idée fixe*, namely:

II. That Man is Descended from Fish

This obsession is quite as general as the last. Haeckel is mainly responsible for its popularity. He had the effrontery to proclaim it to be a 'Biogenetic Law' that:

'The history of the fœtus is a recapitulation of the history of the race' (*The Evolution of Man*, Eng. tr., 1906, p.2).[11]

As the evolution theory asserts that men are descended from fishes, the human embryo must, according to this law, pass through a fish stage; and Haeckel claims that it does so. This claim is mainly supported by the fact that the embryo, although never generally resembling a fish (or any other adult), does at an early stage exhibit what some regard as gill clefts, which are never functional in man and land animals.

'The fact [he says] that they are found in the same form as in the fishes is one of the most interesting proofs of the descent of these three higher classes (reptiles, birds and mammals) from the fishes' (*ibid.*, p. 110).

This has since been repeated parrot-like by hundreds of biologists. Thus Professor Munro Fox, F.R.S., writes:

'The embryos of both birds and mammals, including man himself, have gill slits. . . . This means that land vertebrates once had fish-like ancestors' (*Biology; An Introduction to the Study of Life*, 1934, p. 303).

Similarly H. G. Wells, G. P. Wells and Julian S. Huxley write:

'The early embryos of man, cat, hen and snake . . . are alike . . . in having their heart, main arteries and neck region built on the same plan as in fish. . . . This means nothing, indeed makes nonsense, if we are to believe that land animals were created as land animals. But it at once becomes pregnant with meaning if we accept the fact of

[10] Including Marcelin Boule (see *The Nineteenth Century*, April, 1943, p. 173). Nevertheless Mr. B. A. Howard, a Headmaster, has written a book entitled *The Proper Study of Mankind*, in which he tells his young readers that they must never 'forget Man the Ape in their struggle to achieve Man the Angel' (p. 229). He declares that they need 'an education which will give them a knowledge of their ancestry'—an ancestry which, on Haeckel's own showing, 'is and ever will be a fabric of hypothesis.' This book, now in its second edition, is recommended to those entering the Methodist ministry! Compare with Professor H. F. Osborn's statement that: 'The entire monkey-ape theory of human descent is a fiction which has been entirely set aside by modern anatomical research' (*New York Times*, July 12th, 1925).

[11] He thereby replaced Von Baer's generalisation that the young stages of animals resemble the young stages of creatures lower down the scale, by the fiction that they represent *adults* lower in the scale—an idea which Von Baer expressly repudiated. According to Professor W. Garstang (*Quart. Journ. Micros. Sci.*, Vol. 72, 1929, p. 62), Haeckel's 'theory of adult recapitulation is now dead and need no longer limit and warp us in the study of Phylogeny' a pungent reflection on the efforts of our propagandists.

evolution, for then we can understand that snakes and hens and human beings and all other air-breathing vertebrates are fundamentally fish-like, that they start on the fishward road and turn away from it towards their higher structural achievement. When they reproduce the old disposition asserts itself; they start towards the old water way and then turn aside towards the uplands' (*The Science of Life*, p. 368).

Unfortunately for our propagandists, *at no stage is the embryo of a land animal fish-like: at no stage does it have gill clefts or slits in the wall of the alimentary canal.* These clefts exist only in the imagination of those obsessed by the notion of a fish ancestry. In truth, the developing embryo of a land animal takes the shortest possible course to its final form.[12] It never seems to occur to those who are dominated by the fish-ancestor idea, that during the whole period of development every cell of the embryo needs oxygen, also nutrition, and also a means of ridding itself of waste products while nourishment is being converted into tissue. Thus these worthies, under the blinding effects of their fixed idea, ignore the first principles of embryonic development! Before the human embryo is an inch long, it requires a heart and blood-vessels. Do evolutionists imagine that it would be possible, in the first sixteen days of its existence, for it to develop a complicated heart like that of man? Since this is physically impossible, a simple tubular heart—such as suffices for a simple animal like a fish—is quickly developed ventrally to the alimentary canal. Then the artery issuing from it, with the surrounding tissues, forms the foremost visceral arch; and so, without piercing the alimentary canal, reaches the upper part of the body, and then bends back and conveys blood to the middle and hind regions. Then, as more blood is required, more of these visceral arches are formed in quick succession.

They are called arches, because each arches the very thin wall of the alimentary canal—both inside and out. They are close together, and the very small space between each forms a furrow, the bottom of which is furnished by the thin wall of the alimentary canal. It is these visceral furrows or grooves[13] that Haeckel and his dupes call 'gill-slits' or 'branchial-clefts.' They are, of course, nothing of the sort, and have no respiratory function. They are absolutely necessary for the development of every vertebrate embryo, whether of fish or land animal; and that is why they appear. The subsequent development of these visceral arches depends on the type of animal concerned; if it be a fish, they develop into gills and gill-slits; in land animals they never do this, but take a different course, varying with the class to which the embryo belongs. In the case of man (as can be ascertained by consulting a book on human anatomy) these arches and furrows give rise to the lower jaw and parts of the face, ear, tongue, neck, etc., such as the eustachian tube and the thymus gland.

In the embryos of reptiles, birds and mammals there are no clefts between the arches; and the blood vessels in the arches do not split into two. It is therefore incorrect, and

[12] As J. W. Ballantyne observed: 'The embryo is not like a finished piece of mechanism which can be studied both in action and at rest; it is unfinished, it is like a piece of mechanism in process of construction, and its activities consist in a ceaseless progress towards a termination which shall also be a completion'; and he concludes by insisting that 'ontogeny does not give a short recapitulation of evolutional progress; it is not an epitomised phylogeny' (art. 'Human Embryology' in *Green's Encyclopædia and Dictionary of Medicine and Surgery*, 1907, Vol. III, pp. 71, 73). De Beer enforces the same conclusion to-day. As Professor A. Sedgwick sarcastically wrote: 'The recapitulation theory originated as a deduction from the evolution theory and a deduction it still remains' (art. in *Darwin and Modern Science*, p. 176).

[13] Keith calls them 'furrows' (*the Nineteenth Century*, August, 1922, p. 175, etc.); while Ballantyne calls them 'grooves,' saying that 'they are never really clefts in the human embryo' (*loc. cit.* p. 87).

most misleading, to call them 'gill' arches in these embryos, or to call the grooves between them 'clefts' or 'slits.' EMBRYOLOGY LENDS NO COUNTENANCE TO THE IDEA THAT THE HIGHER VERTEBRATES EVOLVED FROM FISH-LIKE ANCESTORS.

In a subsequent article we proposed to examine more of these obsessions.[14]

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[14] We can only, in these articles, discuss the principal obsessions evidenced by evolutionists. Other obsessions can be found by examining transformist works for statements in clear discordance with facts. Most of such works exhibit quite an assortment; for the acceptance, as science, of an unprovable dogma (of unlimited continuity) has dulled the critical faculties of most biologists while fostering their tendencies to wishful thinking. So the total number of their obsessions is considerable—those of one man often differing from those of another. Thus Dr. Julian S. Huxley declares that: 'In the past of geology the slow, wasteful forces of natural selection have created the marvellous mechanism of ant, bee, bird, horse and man out of mere slime' (*Evening Standard*, October 12th, 1927). This is his personal obsession, as a Darwinist; for members of other evolutionary sects reject this fantasy, and palæontologists know that geological facts are directly opposed to belief in natural selection (see *The Nineteenth Century*, April, 1943, pp. 170-171; January, 1944, pp. 31-32, etc.). It is therefore engaging to find this same Dr. Huxley declaring that scientific men (among whom he doubtless includes himself) refuse to accept any conclusion which is not independently verifiable (*Nature*, July 17th, 1943, p. 79). This is obviously another personal obsession, of which even his own practice cannot disabuse him.

MORE OBSESSIONS OF BIOLOGISTS

IN a previous article[1] we discussed two of the obsessions, or fixed ideas, to which many modern biologists are subject. Both of those obsessions concern supposed facts of man's descent from lower animals. We now propose to examine some of the more quasi-philosophical obsessions to which these workers are equally subject, starting with the idea:—

III. THAT EVOLUTION IS A HIGHER CONCEPT THAN CREATION

Darwin himself urged this, *e.g.*, in the closing words of his *Origin of Species;* and modern writers often similarly assert that it is behaving 'like a savage' to regard species as separately created. Indeed, it has even been declared that nobody before Darwin was 'able to conceive of any mutability of organic types' (J. Needham, *Great Amphibium*, p. 81). That is, of course, nonsense; and its clear opposition to facts shows its pathological nature.

It is notorious that the idea of organic evolution, or mutability, goes back to remotest antiquity. Apart from the facts already noted,[2] extreme and fantastic belief in evolution has been exhibited by savages (*e.g.*, Totemists) from time immemorial; while the mythologies of all nations are packed with stories of physical transformations. And since our nursery books are also full of the same, while evolutionary fables are now being taught to infants, it is clear that the simplest minds can grasp the idea of transformism just as readily as that of creation. Indeed, it has always been among civilised peoples—and adult members of the same—that imagination has been curbed, in view of the constancy of types in real nature; a constancy which G. Fano styles 'the adamantine resistance of species' to all theories of transformism (*Brain and Heart*, Eng. trans., 1926, p. 38).

[1] *The Nineteenth Century and After*, July, 1944, pp. 19-27.

[2] *Ibid.*, footnote 4, p. 19.

Those who appreciate this 'adamantine' constancy are apt to fall back upon another *idée fixe*, namely:—

IV. That Special Creation is Incredible

Professor D. M. S. Watson, F.R.S., is a typical zoologist obsessed by this idea; and he seems to think that all must be under its influence, for he told the British Association that: 'Evolution itself is accepted by zoologists not because it has been observed to occur or . . . can be proved by logically coherent evidence to be true, but because the only alternative, special creation, is clearly incredible' (*Rep. Brit. Ass. Adv. Sci.*, 1929, pp. 88, 95).

If Professor Watson cannot believe in special creation, he is entitled to say so; but only obsession could make him think that it must be equally incredible to everyone else. Many people, including zoologists, find it perfectly credible; and it was, in fact, accepted by nearly all scientists until quite recent days. The very founders of the sciences of comparative anatomy and palæontology—men like Cuvier, d'Archiac, d'Orbigny, Barrande, Agassiz, Forbes, Sedgwick (the instructor of Darwin), and scores of other scientists of the first rank—were convinced of the fact of special creation. Were they mentally deficient on that account? If not, then why should others be so if they believe in creation to-day —seeing that, on Watson's own showing, 'evolution itself' cannot be proved?

Even Huxley—'Darwin's bulldog' as he was sometimes called, since he did most of the fighting while Darwin did the speculating—made no such pretence as Watson does, but rebuked those who were beginning to put it forward. 'It seems to me,' he wrote, 'that "creation" in the ordinary sense of the word, is perfectly conceivable. The so-called *a priori* arguments against Theism, and given a Deity, against the possibility of creative acts, appear to me to be devoid of reasonable foundation' (*Life of C. Darwin*, Vol. II, p. 187). So, according to the greater Huxley himself, this *idée fixe* (now well in the saddle) that special creation is intrinsically incredible, is 'devoid of reasonable foundation.' He shows that the possibility of creative acts must be allowed so long as the existence of a Deity is possible; and who has shown a Deity to be impossible?

Professor Watson, however, seems desirous of ruling the idea of creation out of court on the ground that it lacks elementary justification. This was continually apparent in the highly questionable talks which he gave in the B.B.C. series entitled 'Man's Place in Nature'; as, *e.g.*, when he declared that 'the animal kingdom is formless, unplanned, owing its character to accidental events' (*The Listener*, 1942, p. 621). The worthy Professor, being unable to see any plan in nature, imagines that nature must be planless. It does not occur to him that others may be justified in declaring that planning and design are visible throughout nature. He is like a colour-blind man who denies the existence of colour. Even Einstein, although a professed pantheist and ultra-determinist, insists on 'the sublimity and marvellous order' revealed in nature, and talks of his 'rapturous amazement at the harmony of natural law, which reveals an intelligence of such superiority that, compared with it, all the systematic thinking and acting of human beings is an utterly insignificant reflection' (*The World as I see It*, Eng. trans., 1935, pp. 25, 28).

If that be so, it is difficult to see why the same 'superior mind revealing itself in the world of experience' (*ibid.*, p. 131) should not sometimes (for reasons beyond our ken) have produced results outside our own brief 'experience.'

But here we encounter an alternative obsession; for many who are far from denying the evidence for a transcendent external mind and power, and so do not deny special

creation on the grounds indicated by Watson—*i.e.*, that it is unthinkable because everything is an accident—are nevertheless subject to the fixed idea:—

V. That Belief in Special Creation is Unscientific

Those who maintain this proposition usually have sufficient knowledge of history to realise that special creation has always been credible—even, as Darwin admitted, to thinkers 'of the highest eminence' (*Origin of Species*, 6th ed., reprint 1882, p. 428)—but suppose that it is somehow opposed to 'science,' and must therefore be noxious and untrue.

Now this idea is less patently absurd than the last; for special creation is distinct from normal events, and so cannot be explained by workers (popularly called 'scientists,' but really 'natural scientists') whose province is the study of natural processes, *i.e.*, Natural Law and its effects. But that obviously affords no argument against the possibility of special creation, unless we make the unwarrantable assumption that nothing can ever have happened apart from natural law. The question of special creation is one of historic fact—and, as such, it must be decided by evidence, not by assumption. If it has occurred, it is part of truth, whether or not it is explicable by causes understood by us. 'Science' is only a Latinised word for 'knowledge'; and knowledge is a very broad subject. It includes all verified facts—not only explained facts,[3] much less only facts explained along certain limited lines.

This was clearly indicated by Professor Tyndall (who was no believer in Revelation, but possessed ordinary common sense which many biologists seem to lack to-day). 'It is self-evident,' he said, 'that if there is a God, He is almighty, and therefore can perform miracles; but science has nothing to do with miracles, because supposing their existence, they lie outside its proof' (cited by Professor Bettex, *Modern Science and Christianity*, p. 169). By 'science,' of course, Tyndall meant *natural* science; but his remarks clearly recognised that things could happen 'outside its proof' provided 'there is a God.' And who can disprove the existence of God?

In short, this talk of belief in special creation being 'unscientific,' simply amounts to a claim that it would be inexplicable by natural law. But who ever thought anything else? And what right has any professed scientist (whose first concern is to discover facts, and second concern to explain them) to claim in advance that nothing can exist which is inexplicable by natural law? It is clear that, so far from belief in the possibility of special creation being 'unscientific,' it is the denial of that possibility which is unscientific—taking 'science' in its broadest sense, as the establishing of facts, whatever their explanation may be.[4]

The desire, however, to explain matters in terms of natural law is perfectly legitimate—indeed, essential if we are ever to find the limits of what is thus explicable. Distortion comes in when the hypothesis of natural cause is treated as sacrosanct, a foregone conclusion, a result of research instead of an instrument for research. For while hypothesis is necessary, so also is its challenging.[5] But our fanatics regard the more drastic challenging as a blasphemy; and so biology is crammed with rubbish, issued in the name of

[3] We know, and act on, many facts which we cannot explain (*e.g.*, that water expands on freezing); and all explanations end in ultimate mystery.

[4] Thus G. Fano, remarking that 'the mind of many biologists is set, so that they will not tolerate the discussion of any force which is not physical or chemical,' observes that 'the immensity of our ignorance, when compared with the very little that we know does not authorise such dogmatic obstinacy in us. It would be more scientific to assume a humbler attitude and be less assertive in our formulæ' (*Op. cit.*, p. 42).

[5] As T. H. Huxley said, 'the historical progress of every science depends on the criticism of hypotheses' (*Hume*, 1879, p. 55). The reluctance of modern biologists to face such criticism is discussed in our pamphlet *Evolutionists under Fire*.

'science,' and surviving only because of the idea that to question it is to question science. Few seem to realise that the most powerful purge of all such dross is the counter-postulate of creation. It is that, above all, which ensures that whatever passes its rigorous challenge shall indeed be part of natural science.

The trouble, however, with the remote past is that this drastic challenge (when applied) cannot be shaken off, for the simple reason that the evidence is totally inadequate for disproving creation—which its nature actually endorses. Those, therefore, who object on principle to any suggestion of miracle, are apt to clamour for belief in evolution, as a kind of sacred duty, under the common delusion:—

VI. That Evolution Eliminates Miracle

But it really does nothing of the sort. Indeed, evolution itself is so contrary to the observed constancy of nature, and involves the bridging of so many—and colossal—structural gaps in defiance of all reason and probability, that to invoke it instead of special creation may be said to demand a multitude of miracles instead of relatively few.

The idea that an amœba-like creature became gradually changed into fishes, crocodiles, birds, whales and men by the blind forces of nature, is simply puerile. Nothing distinguishes it, in principle, from fable-mongering of the grossest kind. It is popularly claimed to be 'scientific' because it appeals to 'known causes,' instead of falling back upon an unknown cause by talking of Divine intervention. But Divine intervention, whether rightly invoked or not, would at least be adequate; so its invocation is not intrinsically absurd. On the other hand, the besetting sin of all schools of transformism, as the Duke of Argyll acutely observed long ago, is simply this, that they all 'ascribe to known causes unknown effects' (*Primeval Man*, 1869, p. 44); and if it is scientific to attribute unknown effects to known causes, then the negro story-teller Uncle Remus was scientific when he accounted for the speckles on guinea-fowl not by talking of a Creator, but by saying that Sis' Cow (in return for favours received) obligingly decorated them by splashing milk over them with her tail; and they then sat in the sun until the milk dried, since when they and their descendants have shown the speckles.[6] For cows really have sometimes splashed with their tails, and milk really has sometimes left stains when dried. Was Uncle Remus' proposition therefore a scientific hypothesis? If not, why should fallacies of the same order be scientific when they appear between the covers of *The Origin of Species* or *The Descent of Man*? Are the methods of the fable-monger sanctified by transference from the log cabin of a negro slave to the august residence at Down?

Apparently it is thought so. We are assured that 'the present is the key to the past,' and it is insisted that 'we are not at liberty to imagine new causes of change when those seem insufficient which occur in our experience' (Sir A. Geikie, F.R.S., *Centenary Geol. Soc. Lond.*, p. 115).[7] Uncle Remus observed this very principle, adhering strictly to his own experience. We also read, regarding an outstanding biological mystery, that: 'The problem of the origin of life is that of the formation of quantities of carbonaceous jelly under such conditions that it would have mechanically subdivided, and the separate parts would inherit the power to grow and subdivide in turn' (Professor J. W. Gregory, F.R.S., *The Making of the Earth*, p. 228). Clothed in similar language, the theory of Uncle Remus would look just as good: 'The problem of the markings on guinea-fowls is that of the distribution of quantities of an opaque fluid over the bodies of their ancestors under such conditions that it would have mechanically subdivided and settled in minute spots, and the birds would inherit the power to retain the markings and transmit them to their offspring in turn.' Assumption for assumption, fallacy for fallacy, there is little to choose between the F.R.S. and his negro prototype.

[6] Noel Chandler Harris, *Nights with Uncle Remus* (1884): 'XXXIII. Why the Guinea-Fowls are Speckled,' pp. 153-7.

[7] Citing Hutton. Had Hutton said 'sufficient' instead of 'insufficient' it might have seemed more reasonable; yet this extraordinary dictum has actually been regarded by many as the acme of 'science.'

The general adoption of such methods by modern biologists degrades their sense of logical requirements, and brings their writings into contempt with practical workers who still insist on those requirements—and obtain solid results by doing so.[8] The comments of one physicist, Professor L. T. More, appear at the head of our last article; and Sir Ambrose Fleming is another, who writes in similar vein. The law has produced many critics of evolutionary dialectics, and trained thinkers of all professions have protested against imagination being allowed to run riot in the professed name of science.

Evolutionists have consequently taken to declaring that only biologists are qualified to discuss the matter.[9] If biologists become sceptical, pressure is applied to make them keep their doubts to themselves. Few are prepared to face the general hostility of their colleagues. The fact that evolution is freely criticised by foreign biologists (whose colleagues are less enamoured of the doctrine) is ignored, and the works expressing their strictures are boycotted. So the further belief has arisen:—

VII. That there are No Competent Critics of Evolution

Thus Professor E. S. Goodrich, F.R.S., of Oxford University, actually declares that: 'It is now universally held by competent biologists that all organisms, living or extinct, have arisen from remote common ancestors by a process of gradual change or evolution' (Art. 'Evolution' in *Enc. Brit.*, 1929, Vol. VIII, p. 917).

Such an assertion is astounding; for Professor Goodrich must know that many biologists of high standing have emphatically repudiated and openly attacked the belief which he here claims to be universal among such men. We refer, for instance, to V. Diamare, Director of the Institute of Osteology at the University of Naples; A. Fleischmann, Professor of Zoology at Erlangen University[10]; J. Lefèvre, Director, Laboratoire de Bioénergétique, Paris; P. Lemoine, Professor of Geology and Director of the Museum of Natural History in Paris; H. Nilsson, Professor of Genetics, Lund University, Sweden; L. Vialleton, Professor of Comparative Anatomy at Montpellier; and recall Vialleton's statement,[11] in this connection, that: 'Critics of evolution have multiplied to such an extent that it is impossible even to list them here. It must suffice in order to give some idea of them to refer to the short résumés given by Diamare in *Studie Senesi*, Vol. XXIX (1912) and Carazzi in *Il Dogma dell' Evoluzione* (1920).'

It is difficult to believe that Professor Goodrich can have failed to hear of some, at least, of these open and prominent opponents of evolution; so it seems that obsession alone can account for his making a statement so patently out of accord with reality.

[8] While Darwinists spin fairy-tales and wage endless war with rival sects of evolution, the physicists, chemists, and other genuine scientists (including *practical* biologists like medical men, geneticists, etc.) have transformed our whole manner of life within the last two generations.

[9] They do not object, however, to non-biologists writing *on behalf of* evolution; and the Rationalist Press Association actually sent Mr. Joseph McCabe, who seems to have no scientific status whatever, to meet Mr. Dewar in public debate on evolution, at the Conway Hall on February 2nd, 1937. The result was so disconcerting to Mr. McCabe that he refused to let his own part of the discussion be published, even though recorded by the R.P.A. reporter (see *A Challenge to Evolutionists*, by D. Dewar, 1937).

[10] Even V. L. Kellog noted Fleischmann's opposition as that of a 'reputable zoologist' and a 'biologist of recognised position' (*Darwinism To-day*, p. 8). Shortly before the war, Fleischmann told Davies that he had just completed writing another anti-evolution book (letter of May 30th, 1939).

[11] *Memb. et Ceint. des Vert. Tét.*, p. 696.

Conclusion

What, then, are we to say? The hypothesis of evolution is legitimate enough—until it is disproved; but so also is the hypothesis of creation—until it is disproved. It is not the province of science to prejudge any matter, or rule any possibility out of court on the grounds that one section of science (*i.e.*, natural science) could not deal with it.

A *prima facie* case for postulating some degree, at least, of evolution, is found in the fact that creatures are not absolutely constant in type. The demonstrated amount of change is not great, but the limits of its possible amount cannot be stated with certainty.

A *prima facie* case for postulating creation is found in the proved general constancy of types, despite the small amount of change that has been demonstrated. It also appears in the character of the geological record: the sudden appearance in wide diversity and high specialisation of types, of the first forms of life; the sudden appearances, in full perfection, of the first swimming creatures, the first flying creatures, and the first highly specialised and differentiated organs of every kind—eyes, feathers, etc.

It seems, indeed, impossible for anyone knowing the facts (unless he be the victim of an overpowering obsession) to deny the evidence for the operation of supernatural power and intelligence in nature. Life must, at one time, have appeared in a previously lifeless world; so far as we can see, life never appears in the world to-day except from pre-existing life of a similar kind. The very processes of life are instinct with apparent intelligence, which is certainly not the intelligence of the creatures themselves, and inevitably suggests purpose in the mind of a divine Being who ordered and upholds them. Materialists are compelled to admit this, and can dismiss the conclusion only by bald and unconvincing dogmatism, while their suggested alternatives are fantastic. C. E. Raven rightly styles some of the latter 'literally as absurd as the supposition that a fortuitous coincidence of letters was responsible for the appearance of Hamlet' (*Science, Religion and the Future*, 1943, p. 49).

The objection that special creation cannot be definitely proved to have taken place affords no justification for dismissing its possibility. Wholesale evolution also cannot be definitely proved to have taken place, so the demand for such proof is double-edged.

The greatest difficulties exist in reconstructing geological history, which can only be traced by means of circumstantial evidence whose deficiencies the evolutionist is the first to stress—when it suits him. Thus, if God by His fiat called suddenly into existence a host of animals and plants, no amount of (natural) scientific investigation would show how this was effected. Nor would it prevent the evolutionist from suggesting that these creatures had really been evolved, but their ancestries had been lost.

On the other hand, even where fossil evidence seems most clearly to indicate some limited degree of evolution—usually within the genus, if not within the species—it is equally inconclusive if a God exists (and who can disprove His existence?) who may see reason to intrude fresh creation even in the heart of existing creation (*cf.* Ex. viii. 17). In short, we simply do not possess the means of finally deciding questions of remote history.

As Dr. S. Zuckerman writes regarding the origin of man's mental powers: 'Either evolutionary change or miraculous divine intervention lies at the back of human intelligence. The second of these possibilities does not lend itself to scientific investigation. It may be the correct explanation, but, from the scientific point of view, it cannot be legitimately resorted to in answer to the problem of man's dominantly successful behaviour until all possibilities of more objective explanation through morphological, physiological and psychological observation and experiment are exhausted' (*Functional Activities of Men, Monkeys and Apes*, 1933, p. 155).

If all evolutionists were similarly content to allow that divine intervention 'may be the correct explanation,' until they are in a position to disprove it, we would have no fault to find with their attitude. Unfortunately, as we have seen, most of them exhibit a closed mind on the subject—refusing to acknowledge that divine intervention might be the explanation, because they are obsessed by the idea that special creation in incredible.

It is strange that they should thus ignore, in the pretended name of 'science,' a possibility which science as a whole is bound to recognise if it is not to deny its own essence. They may not, of course, be conscious offenders, but do this because those who taught them, at a time when they were incapable of forming independent judgment, instilled the idea into them that that was the 'scientific' way to act; while opponents of evolution were ignored in the manner that we have seen. As Professor L. Vialleton well said: 'The manuals of the past fifty years are simply illustrations of transformism, setting forth only that which is favourable to it, passing over in silence everything outside or against it' (*Memb. et Ceint. des Vert. Tét.*, 1924, p. vii).

Biological students are being taught at school, college and university, that evolution is a law of nature; and all facts opposed to it are withheld from them. So they leave their university in complete ignorance of the true state of affairs. While in this condition, many of them take up some branch of research work, and view everything through evolutionary spectacles, regarding any data that oppose their beliefs as 'anomalous' and requiring to be explained away, while any seeming coincidence with their views is immediately and uncritically hailed as further 'proof' of evolution. Others teach biology, and so innocently pass on what they have been taught, without even encountering the 'anomalous' facts.

At the same time, most people who are not biologists accept evolution because it is 'in the air,' so to speak, in every sense of the word. Press and pulpit take it for granted; and no argument for the truth of a belief is more cogent, to most people's minds, than its seeming universality. Nor does anything more encourage its votaries than to be able to claim such universality, and all their efforts are aimed at securing it.

'Dico ego, tu dicis, sed denique dixit et ille!
Dictaque post toties: nil nisi dicta vides.'

Hence the flooding of the country with cheap books 'boosting' evolution, issued under the auspices of the Rationalist Press Association. Bad as that influence is, however, in the view of those who would like to see the subject treated impartially, it is eclipsed in noxious effect by the capturing of the B.B.C. by parties interested in securing the universality of evolution dogma. For one still has choice of books; but the British public has no longer any choice as to what it hears over the air. Advantage has been taken of this fact to select propagandists like Professor D. M. S. Watson and Dr. Julian S. Huxley to sandbag adults into belief in evolution by subjecting them to monstrous claims, which would not stand a moment's examination by a competent critic; while similar nonsense, in dramatic form suitable for children (with uncouth noises, etc., from the past, supposed to represent their half-brute ancestors), impresses on infants 'How Things Began' according to evolutionary nightmares. So the next generation is biassed from its earliest years. Lest any counter-impressions should be received by young or old, the B.B.C.—while loudly asserting that it favours free discussion on all disputed matters—persistently refuses, behind the scenes, to allow biologists who oppose evolution to meet Watson, Huxley & Co., in broadcast debate over their perversions of scientific facts.[11]

[11] Although petitioned by people of all classes, from all parts of Britain, including University Professors and leading clergymen of all denominations, who urged that both sides should be heard on so important a subject. Details of our correspondence with the B.B.C. were published by us (Davies and Dewar) in a pamphlet entitled *The B.B.C. Abuses its Monopoly.*

Were it not for the monopoly enjoyed by the B.B.C., such unblushing suppression of the truth would not be possible. One company would see that another did not disseminate too great nonsense. But as things are, all Britons must listen to what the B.B.C. chooses that they shall hear; and they have no means of applying criticism or test if they disagree with it."

Meanwhile we hope that these articles may show some people, at least, how matters really stand. The chief subjects of our strictures have reason to know that we would welcome any attempt on their part to question the substantial accuracy of our representations.

DOUGLAS DEWAR.
L. M. DAVIES.

[1] The following facts may be noted: In his B.B.C. Close-up on October 20th, 1943, the Director of Talks (Mr. G. R. Barnes) declared that the B.B.C. should protect minorities, and have both sides of questions discussed. Similarly, during the B.B.C. Coming-of-Age celebrations, the Minister of Information (Right Hon. Brendan Bracken, M.P.) declared that 'democracy thrives on argument,' and 'The B.B.C. should encourage discussion on all vital issues. Calling impartially on all sides, it should be a great national forum' (*The Times*, December 9th, 1943). Fine words! Yet the Talks Director persistently refused to let us broadcast reply to Watson's and Huxley's claims regarding evolution; and when Davies asked Mr. Brendan Bracken how he squared this refusal with his own public professions, Mr. Bracken replied that he took 'absolute responsibility for all the B.B.C.'s doings,' and had advised the B.B.C. to be 'very tough with anyone who attempts to put pressure on them' (letter of February 2nd, 1944). Comment seems superfluous. Since then, Mr. Bracken has again stated (House of Commons, June 29th, 1944) that he 'wanted the B.B.C. to become a forum, with both sides stating their case.' And so the merry game proceeds: opponents of causes favoured by the B.B.C. are refused a hearing, while the B.B.C. loudly professes its eagerness to hear 'both sides.'

That we (Dewar, B.A., F.Z.S., and Davies, D.Sc., Ph.D., F.R.S.E., F.G.S.) present a reasonable case against Watson's and Huxley's broadcasts, was admitted by the Council of the Royal Society of Edinburgh (*vide* Secretary's letter to Davies, June 18th, 1943). Yet young Mr. S. A. Barnett has since been allowed (November 9th, 1944) to broadcast assertions that 'all biologists are agreed . . . about the fact of evolution,' although the B.B.C. know, from our very protests (as zoologist and geologist respectively), that such is not the case.

For our previous articles on this subject see *The Nineteenth Century* for April, August and November, 1943, and January, April and July, 1944. Our opponents have not yet ventured to counter our statements publicly, though well aware of them. Their attempts to respond by letter have been unfortunate (*vide* our pamphlet *Evolutionists under Fire*).

Copies of this pamphlet are obtainable at 6d. per copy, 3/6 per dozen, or 3/- per dozen for 4 dozen or more, all post free, from the Hon. Secretaries of the Evolution Protest Movement :—

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